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Hunton & Williams LLP				
Intellectual Property Department				
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Washington, DC 20006				
		EXAMINER		
		KAM, CHIH MIN		
		ART UNIT		PAPER NUMBER
		1656		
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Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

09/767,680

Applicant(s)

GEPEL ET AL.

Examiner

Chih-Min Kam

Art Unit

1656

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 29 January 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 6 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☒ Applicant's reply has overcome the following rejection(s): See Continuation Sheet.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: 34,48-52 and 56.
Claim(s) rejected: 13-17,35-44 and 58-61.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____.
13. ☐ Other: _____.

Continuation of 5. Applicant's reply has overcome the following rejection(s): The rejection of claims 8-9 and 45-47, under 35 U.S.C. 112, first paragraph because of cancellation of the claims; and the rejection of claims 4-7 and 10-12 under 35 U.S.C. §103(a) as being unpatentable over Kaneko et al. (USPN 5,075,22) because of cancellation of the claims.

Continuation of 11. does NOT place the application in condition for allowance because: Applicant's reply does not overcome the rejection of claims 40-42 under 35 U.S.C. 112 second paragraph, as being indefinite, because claims 40-42 do not further limit claim 13, the term "which is useful....." or "which is capable of reducing ..." indicates an intended use or an inherent property; and the rejection of claims 13-17, 35-39, 43, 44 and 58-61 under 35 U.S.C. §103(a) as being unpatentable over Kaneko et al. (USPN 5,075,22).

In the amendment filed Jan 29, 2007, claims 13-16 have been amended, claims 29-33, 45-47 and 53-55 have been cancelled, and claims 13-17, 34-44, 48-52, 56 and 58-61 are pending.

In the response to the rejection under 35 USC 103 (a), applicants indicate that the pending claims are drawn to an isolated starter culture comprising at least one modified lactic acid bacterial cell wherein said starter culture is in the form of a frozen or freeze-dried culture and said starter culture comprises an amount of viable lactic acid bacterial cells which is in the range of 10^{10} to 10^{12} CFU per gram; and that there is no teaching in Kaneko et al., nor a suggestion to modify the teachings of Kaneko et al., to obtain the claimed isolated starter culture of claim 13 (pages 7-8 of the response).

Applicants' response has been considered, however, the arguments are not persuasive because of the following reasons. Kaneko et al. (USPN 5,075,226) teach culturing lactic acid bacteria, aerobically, in haemin (MW 651 g/mol) at a concentration of 0.1-500 μ M (column 3, lines 21-24; Examples; where 0.1-500 μ M corresponds to 0.065 to 327 mg/L haemin), and using concentration of 1-2% in inoculation as a starter culture to produce diacetyl and acetoin (see column 5; Example 1). Since culturing lactic acid bacteria in a medium containing 10 mg/L haemin produces a modified lactic acid bacterial cell comprising at least 0.1 ppm of haemin as evidenced by Geppel et al. (US 2001/0033879 A1), and Kaneko et al. teach culturing lactic acid bacteria in haemin (e.g., at a concentration of 500 μ M), it would be expected that Kaneko et al. teach a culture solution having a modified lactic acid bacterial cell comprises at least 0.1 ppm of haemin as the claimed invention. Further, Kaneko et al. teach the use of *Lactococcus lactis* from the ATCC (see column 3, lines 60-65), which cells are delivered either as frozen liquid or freeze dried with a cryoprotectant added; and the patent also teaches using concentrations of 1-2% in inoculations as a starter culture (see column 6, examples 2 and 4), which concentration exceeds the requirement of 10^{10} CFU. Thus, it would be obvious that the culture solution of Kaneko et al. results in the claimed starter culture. Therefore, the rejection of the claims under 35 U.S.C. §103(a) is maintained (see also paragraph 32 of previous Office Action dated 8/1/03).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chih-Min Kam whose telephone number is (571) 272-0948. The examiner can normally be reached on 8.00-4:30, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathleen Bragdon can be reached at 571-272-0931. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chih-Min Kam, Ph. D.
Primary Patent Examiner



CHIH-MIN KAM
PRIMARY EXAMINER

CMK
February 10, 2007